

## ABSTRACT

Fractal structures are grown from a plurality of start sites. The fractal structures growing from their  
5 respective start sites progress their growth while interacting with each other to form fractal structures coupled to each other and create a neural network. Growth rate from a specific start site is determined by the probability that a material reaches a portion already grown  
10 from a remote site in a diffusion process and the probability that a growth promotion factor reaches the portion already grown from portions grown from the other start sites in the diffusion process. Anisotropy, if necessary, may be introduced into the space where the fractal structures are  
15 grown.

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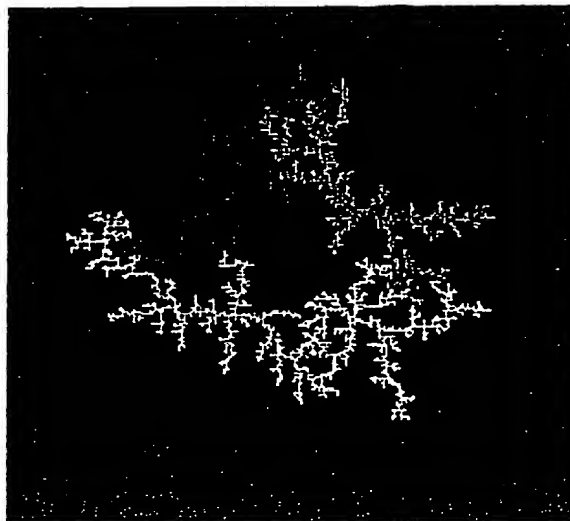
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(54) Title: METHOD OF FORMING FRACTAL STRUCTURE

(54) 発明の名称: フラクタル構造の形成方法



(57) Abstract: A fractal structure is grown from a plurality of starting points. A fractal structure, grown from respective starting points and interconnected by interactive growths, forms a neural network. A growth speed originated at a specific starting point is determined by the probability of a material reaching a grown portion from a remote location by means of a diffusion process and the probability of a growth promoting factor reaching a grown portion by means of a diffusion process from a portion grown from a starting point other than the specific one. Anisotropy is introduced into a space in which a fractal structure is to be grown, as required.

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